5/015/014

Form MR-SMO (Revised 6/96) ALSO SEE FIRE AMROIS-90Z

Assigned DOGM File No.: S 10151074

DOGM Lead: HHG

See Separate binder

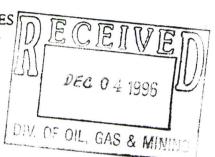
For complete Submission

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

1594 West North Temple Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 (801) 538-5291

Fax: (801) 359-3940



NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program.

"Small Mining Operations" means mining operations which disturb five or less surface acres at any given time.

I. GENERAL INFORMATION (Rule R647-3-104)

1.	Name of Mine:	Number 1 Clark Mine	
2.		pplicant: Robert L. and Julie B. Clark	
	Company () Cor	poration () Partnership () Individuals (X)	
3.		1758 South 900 East	
	City: Salt L	ake City State: Utah Zip Code: 8410)5
	Telephone Number:(801) 466-6432	
4.	Ownership of Land S	urface:	
State Ti	(Fee) ☐ Public rust Land/School Section lease describe):	Domain (BLM) □ National Forest (USFS) □ ons ☑ State Sovereign Lands □	
Name_		Address	
		Address	
		Address	

		Address
	Name_	Address
		Address
	Name	Address
	1	Jtah Mining Claim Number(s):
	τ	Itah State Lease Number(s): 43181
	Ŋ	Jame of Lessee(s) Robert L. and Julie B. Clark
		lave the above surface and mineral owners been notified in writing? Yesx No
	If	no, why not?
Exp.	use be advised ing alone doe loration or mi ds Administra	that if State Trust Lands are involved, notification to the Division of Oil, Gas and s not satisfy the notification requirements of Mineral Leases upon State Trust Lands. ning activity on State Trust Lands requires a minimum of 60 days notice to the Trust tion prior to commencing any activities. Please contact the School Institutional Trust ion (SITLA) at (801) 538-5508 for notification requirements.
Exp.	ase be advised ing alone doe loration or mi ds Administrat ds Administrat 7. De	that if State Trust Lands are involved, notification to the Division of Oil, Gas and s not satisfy the notification requirements of Mineral Leases upon State Trust Lands. ning activity on State Trust Lands requires a minimum of 60 days notice to the Trust ion prior to commencing any activities. Please contact the School Institutional Trust
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areas to be disturbed should be plotted in sufficient detail so that they can be located on the ground. It is recommended that the operator also plot and label any pre-existing disturbances in the immediate vicinity that he is not responsible for.

III. OPERATION PLAN (Rule R647-3-106)

	neral(s) to be mined: Shale, bear	ring tr	ace minerals	
Pro fac	vide a brief description of the proposed mi			processing
	See attached Plan of Ope	ration		
		· · · · · · · · · · · · · · · · · · ·		
	New Road(s): Length	_(ft)	Width_	(1
	New Road(s): Length		Width	15 (1
Ξ		(ft)	Width	15 (1

IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover. To accomplish this, the operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining:

- 1. Keep the mining operation in a safe, clean, and environmentally stable condition.
- 2. Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
- 3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
- 4. Construct berms, fences, or barriers, when needed, above highwalls and excavations.
- 5. Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
- 6. Remove all waste or debris from stream channels.
- 7. Dispose of any trash, scrap metal, wood, machinery, and buildings.
- 8. Conduct mining activities so as to minimize erosion and control sediment.

- 9. Reclaim all roads that are not part of a permanent transportation system.
- 10. Stockpile topsoil and suitable overburden prior to mining.
- 11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.
- 12. Properly prepare seedbed to a depth of six inches by ripping, discing, or harrowing.
- 13. Reseed disturbed areas with adaptable species. (The Division recommends seeding 20 lbs./acre of native and introduced species of grass, forb, and browse seed, and will provide a specific species list if requested.)
- 14. Plant the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4-1/2 inch into the soil fall is the preferred time to seed.

V.	VARIANCE REQUEST	(Rule	R647-3-110))
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Yes ☑ No □

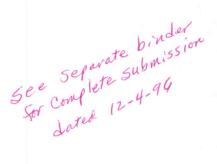
Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above, should be identified below and justification given for the variance request(s).

Item Number	Variance Request Justification
(5) R647 <u>-3-109(4)</u>	see attached Plan of Operation
(7) -109(11)	
(13) -109(13)	H H
(11) -109(7)	11 11

VI. <u>SIGNATURE REQUIREMENT</u>

I hereby commit to conduct mining required by the Utah Mined Land R Oil, Gas and Mining.	operations and to reclaim the aforementioned small mine as eclamation Act (40-8) and the rules as specified by the Board of
Signature of Operator/Applicant:	- Robert F. Clark
Name (typed or printed):	Robert L. Clark
Title/Position (if applicable):	Mineral Lessee and Owner
Date:	12/4/96

Number 1 Clark Mine Plan of Operation



Geology. The mineral resource to be mined under this plan of operation is a relatively thin (1 to 2 feet) layer of humic shale containing minerals that are used in a dietary mineral supplement. This layer of shale is a generally horizontal deposit that is part of a zone in the Mancos Shale Formation where the upper part of the Tununk Shale Member meets the Ferron Sandstone Member. The Tununk Shale Member varies from approximately 250 to 650 feet in thickness and is a dark-gray to black carbonaceous shale interbedded with thin beds of pale-yellow sandstone. The Ferron Sandstone Member is a pale-yellow lenticular sandstone with interbedded carbonaceous shale and coal; it ranges from 50 to 750 feet in thickness. In the general area of the proposed mine, the strike of the members is approximately North 15 degrees East, with the members dipping gently to the West (approximately North 75 degrees West).

Several outcrops of the shale layer of the formation containing the mineral resource are shown in Exhibits "L"-"R." We do not have any core samples in the area of the mine to provide a more exact description of the geologic conditions. More information on area geology may be obtained from the following sources:

- 1. H.S. Bennett, Jr., Photogeologic map of the Emery-10 quadrangle, Emery County, Utah: United States Geologic Survey Misc. Geologic Investigations Map I-11 (1955).
- 2. J.S. Detterman, Photogeologic map of the Emery-2 quadrangle, Emery County, Utah: United States Geologic Survey Misc. Geologic Investigations Map I-9 (1955).
- 3. Paul L Williams & Robert J. Hackman, Geology of the Salina quadrangle, Utah: United States Geologic Survey Misc. Geologic Investigations Map I-591-A (1971) (enclosed as **Exhibit "K"**).

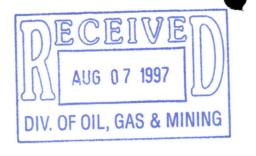
Abandoned Cowboy Mine. Three abandoned coal mine portals, known collectively as the Cowboy Mine, intersect the layer of shale to be mined. (See Exhibits "A" and "D.") It appears that the Cowboy Mine followed a thin seam of high-ash coal near the layer of shale to be



LAW OFFICES

111 East Broadway. Suite 900 Salt Lake City, Utah 84111 (801) 237-1900 Fax: (801) 237-1950

Clay W. Stucki (801) 237-1948



9/015/074

SALT LAKE CITY, UTAH

PHOENIX, ARIZONA

TUCSON, ARIZONA

IRVINE, CALIFORNIA

July 21, 1997

Anthony A. Gallegos Department of Natural Resources Division of Oil, Gas & Mining State of Utah 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801 John T. Blake School and Institutional Trust Lands Administration State of Utah 675 East 500 South, Suite 500 Salt Lake City, UT 84102-2818

Re:

Notice of Intention and Lease Renewal for Number 1 Clark Mine,

S/015/014 (ML No. 43181)

Dear Tony and John:

As you know, we have been waiting on Baseline Data, Inc. to complete the required cultural resources survey before beginning mining operations at the Number 1 Clark Mine. Enclosed is the long awaited cultural resources survey report. In addition, I have enclosed a First Amendment to the Notice of Intention to Commence Small Mining Operations for the Number 1 Clark Mine. Moreover, we have enclosed is a certificate of deposit in the amount of \$5,000 issued by a Utah bank in favor of the School and Institutional Trust Lands Administration as requested by Mr. Blake in his previous correspondence. The enclosed information and bond should satisfy all of the outstanding issues and requirements related to the Notice of Intention and renewal of Mineral Lease 43181. Please issue the approval for the Notice and Intention so the Clarks can begin mining operations.

The First Amendment to the Notice of Intention to Commence Small Mining Operations contains (1) a more detailed map/sketch of the existing disturbances at the site with an overlay of the disturbances proposed by this project; (2) a discussion of the use of the old Cowboy Mine adits; (3) a discussion of the material that will be mined along with an explanation of material disposal practices; (4) a discussion of the access road and BLM right-of-way. If you need any additional information, please let us know immediately. As you know, the Clarks are extremely anxious to begin their mining operations.

In our previous correspondence and discussions, you both asked for some additional information related to the mining and disposal of the material surrounding the seam of shale (the "ore") containing the trace minerals to be mined and leached at the Number 1 Clark Mine. Specifically, Mr. Blake wanted to know how the mined humic shale will be separated from the mined waste rock and coal, and he also wanted clarification on disposal of waste rock and coal. Mr. Blake cautioned that any coal or other minerals having market value which are derived as a by-



Anthony A. Gallegos John T. Blake July 21, 1997 Page 2

product of the humic shale must be conserved and stockpiled for the Lessor. Similarly, Mr. Gallegos expressed concerns about what will happen to the waste material and asking us to describe the physical and chemical characteristics of the waste material. Moreover, Mr. Gallegos asked whether the Clark Number 1 Mine would utilize the old adits from the closed Cowboy Mine.

The attached First Amendment to the Notice of Intention to Commence Small Mining Operations contains the information you have requested and should resolve any of your questions or concerns. Nevertheless, as we have discussed in our previous telephone conversations, we will need to do some excavation work around the old Cowboy Mine adits and obtain material from behind the surface outcrops and inside the adits to provide the best possible information to you. Nevertheless, as we have discussed, we have been able to obtain some additional information without significant surface disturbance by simply using the existing access roads and pad areas associated with the closed Cowboy Mine adits.

Given the attached First Amendment to the Notice of Intention to Commence Small Mining Operations, we believe that the DOGM now has enough information to approve the pending Notice of Intention for the Number 1 Clark Mine. Nevertheless, we will continue to supply additional information related to the surrounding strata and material as soon as we are able to obtain such information. In short, the Number 1 Clark Mine will provide whatever information is necessary to demonstrate that it is not removing any coal pursuant to its shale mining operations.

Thank you for your help in this matter. Although the Clarks are somewhat frustrated with the delays they have experienced, we truly appreciate your efforts to avoid unnecessary burdens or delays.

Very truly yours,

SNELL & WILMER, LLP

Clay W. Stucki

Attorneys for Number 1 Clark Mine

CWS/cjm

cc:

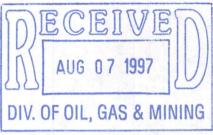
Robert and Julie Clark

Ron Carlson

First Amendment to the Notice of Intention to Commence Small Mining Operations

for

The Number 1 Clark Mine DOGM File No. S/015/014



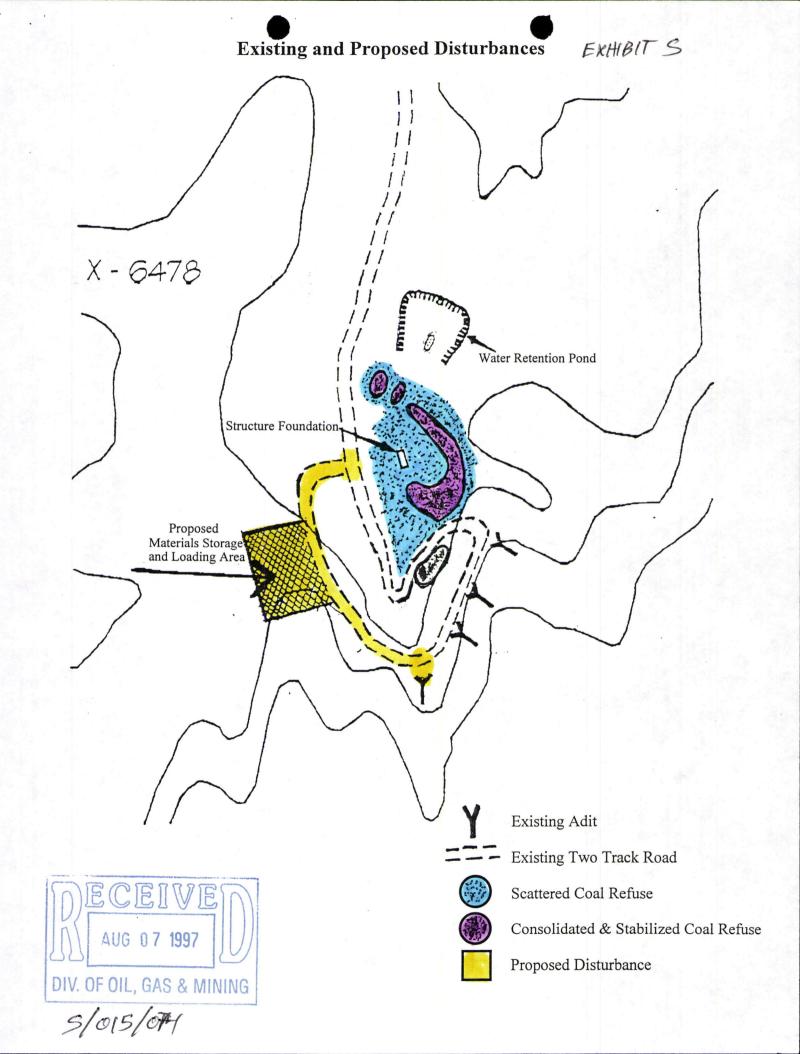
Pursuant to a request from the Division of Oil, Gas, and Mining ("DOGM") for additional information, the Number 1 Clark Mine hereby amends and supplements the Notice of Intention to Commence Small Mining Operations with the following information.

- A1. Existing Disturbances. Existing disturbances from the old Cowboy Mine at the site are shown on the Existing and Proposed Disturbances map attached as Exhibit S. In addition, your own files show many of the existing disturbances in the area. For your convenience, we have enclosed a copy of a DOGM map showing the existing disturbances in the area as Exhibit T. The existing disturbances discovered at this time consist of large coal refuse piles, red dog areas, four adits, an access road to the adits, an old foundation, an old water retention dike, and the loose coal that has been strewn about the general area. These disturbances are shown on the attached maps in Exhibit S and Exhibit T, and additional pictures of the coal refuse and red dogs are provided in Exhibit U. The coal refuse is also shown in Exhibits E through J to the Notice of Intention.
- A2. <u>Proposed Disturbances</u>. As discussed previously, the Number 1 Clark Mine will attempt to minimize disturbances in the area by using the existing access road, although the existing access road may need to be improved in some areas. The areas that will be used or affected by the operations of the Number 1 Clark Mine are highlighted in yellow on the Existing and Proposed Disturbances map attached as Exhibit S. The Number 1 Clark Mine will not disturb the existing coal refuse piles in any way or remove any coal from the property. No coal will be mined or removed in any way from the property. To avoid any questions about reclamation liability for the coal refuse left in the area by previous, unrelated operations, the Number 1 Clark mine has simply decided to stage operations on other nearby ground.
- A3. <u>Use of Cowboy Mine Adits.</u> To maintain as much pillar strength as possible, and to minimize surface disturbances, the present plan is to use one of the old adits from the Cowboy Mine as the portal for the Number 1 Clark Mine. To the extent coal is encountered in the old workings, it will be left undisturbed in place. All mining and use of the old adits will be pursuant to the applicable standards and regulations promulgated by the Mine Safety and Health Administration of the Department of Labor. The old Cowboy Mine adits will be enlarged and reinforced with supports before being used for the Number 1 Clark Mine.
 - A4. Material Removed and Waste Rock. As previously discussed, the target ore is

shale bearing minerals that are leached from the shale and used in mineral supplements. The waste rock surrounding the target layer of shale will be removed with the ore and processed with the ore. It is not economically feasible to try to separate the target layer of shale from the surrounding rock, and it is hoped that the surrounding rock contains at least some target minerals that may be recovered in the leaching process. All of the material mined is removed from the property for processing. After processing, the material will be sold as inert fill or a mineral fertilizer product to be applied to farmland.

The target ore is shale and the surrounding rock is brown shale, grey shale, sandy shale, blue-grey mudstone and yellow sandstone. A laboratory analysis from Western Analysis, Inc. of the leachate produced from running water over the shale and sandstone is contained in Exhibit V. Examination of the old Cowboy Mine adits and surrounding outcrops shows that a layer of grey carbonaceous shale lies below the target ore and surrounding waste rock. If this material contains less than 50% ash content based on ASTM standards, it may be classified as coal. All mining operations will be conducted above this layer, and no coal will be mined at the Number 1 Clark Mine. Further information on the physical and chemical characteristics of the surrounding strata will be obtained when it is safe to enter one of the old Cowboy Mine Adits. Consolidation Coal Company has drilled core samples in this area which provide additional information on the ore and surrounding rock. Although DOGM has access to this information already, the Number 1 Clark Mine cannot obtain this confidential information. Thus, we direct you to your own files to obtain this information.

A5. <u>BLM Right of Way.</u> The road leading to the parcel of state land leased by the Clarks has been in existence and used generally by the public since the early 1900s. Where this road crosses patented fee land, a public right of way has been established pursuant to Utah Code Ann. § 27-12-89. In places where this road crosses BLM land, a public right of way has been established pursuant to R.S. 2477, 43 U.S.C. § 932 (repealed in 1976 but leaving in place public roads already established). Other operating mines in the general area use this access road. Mr. Clark has been in contact with the BLM District Office regarding this access road and will take any action necessary to preserve this right of way.

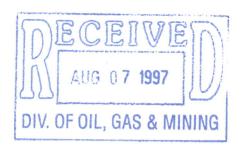






5/015/074





9/015/074

Western Analysis, Inc.

2417 South 2700 West Salt Lake City, Utah 84119 (801) 973-9238 • FAX (801) 973-7635

REPORT OF ANALYSIS

Clark's Minerals Attn: Bob Clark 1758 South 900 East

Salt Lake City, Utah 84105

March 19, 1997 Project# 97-161

	WER DETECTION	Bob Clark #3
ELEMENT	LIMIT (ppm)	(ppm)
Aluminum	0.2	433
Antimony	0.2	n.d.
Arsenic	0.2	n.d.
Barium	0.05	n.d.
Beryllium	0.02	0.07
Bismuth	0.05	n.d.
Boron	0.05	0.48
Calcium	0.05	306
Cadmium	0.05	n.d.
Chromium	0.05	n.d.
Cobalt	0.05	2.23
Copper	0.05	n.d.
Iron	0.05	47.6
Lanthanum	0.05	2.82
Lead	0.2	n.d.
Lithium	0.05	2.35
Magnesium	0.05	387
Manganese	0.2	9.04
Molybdenum	0.05	n.d.
Nickel	0.2	4.0
Niobium	0.2	n.d.
Phosphorus	0.2	n.d.
Potassium	0.2	n.d.
Selenium	0.2	n.d.
Silicon	0.05	2.24
Silver	0.05	n.d.
Sodium	0.1	43.0
Strontium	0.05	2.41
Sulfur	0.05	1800
Tantalum	0.05	n.d.
Thallium	0.2	0.71
Thorium	0.2	n.d.
Tin	0.2	n.d.
Titanium	0.05	n.d.
Tungsten	0.2	n.d.
Vanadium	0.05	n.d.
Yttrium	0.05	0.61
Zinc	0.05	12.9
Zirconium	0.2	n.d.
	ected above stated lø	

Kyle Schick, General Manager

Mine Permit Nu	mber <u>8/05/0</u>	<u> </u>	ime <u>Numbe</u>	r 1 Clark min
Operator <u>Rob</u> O	ert Clark	FROM	Date 12-0	4-1996
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_		PAGES11		LARGE MAP

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NOI	Incoming	Outgoing	Internal	Superceded
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